

CLAIMS

1. A light diffusion film comprising:
a transparent substrate, and
a light-diffusing layer provided at least on one surface of the transparent substrate either directly or through another layer,
the light-diffusing layer comprising an ionizing radiation curing resin and an ultraviolet light absorber and having, on its surface, fine irregularities that have a function of diffusing light.
2. The light diffusion film according to claim 1, wherein
light-diffusing layers are provided on both surfaces of the transparent substrate,
each light-diffusing layer comprising an ionizing radiation curing resin and an ultraviolet light absorber and having, on its surface, fine irregularities that have a function of diffusing light.
3. The light diffusion film according to claim 1, wherein
the light-diffusing layer is provided at least on one surface of the transparent substrate through a primer layer.
4. The light diffusion film according to claim 1, wherein the ultraviolet light absorber is one, or two or more compounds selected from benzotriazole ultraviolet light absorbers, salicylate ultraviolet light absorbers, and benzophenone ultraviolet light absorbers.
5. The light diffusion film according to claim 4, wherein
the ultraviolet light absorber further contains a hindered amine radical scavenger.
6. The light diffusion film according to claim 1, wherein
when being incorporated in a 21-type (21-inch) surface light source unit having a direct-type surface light source member that contains, as a light source, 12 cold cathode ray tubes arranged in parallel, the light diffusion film makes the center portion of the surface of the surface light source unit show a change in hue (b^*), based on the L^* ,

a*, b* color system according to JIS-Z-8729, of not more than 2.0 as a difference between the hue values determined right after the incorporation of the light diffusion film to the surface light source unit and after 5000-hour lighting of the light source.

7. A surface light source unit comprising:

a direct-type surface light source member containing a plurality of light sources that are arranged in parallel and a reflector surrounding these light sources, having an opening on the light-emerging side and a light-reflecting face on its inner surface,

a light diffusion film placed on the light-emerging side of the direct-type surface light source member, and

a lens film placed on the light-emerging side of the light diffusion film,

the light diffusion film comprising:

a transparent substrate, and

a light-diffusing layer provided at least on one surface of the transparent substrate either directly or through another layer,

the light-diffusing layer comprising an ionizing radiation curing resin and an ultraviolet light absorber and having, on its surface, fine irregularities that have the function of diffusing light.

8. The surface light source unit according to claim 7, wherein

light-diffusing layers are provided on both surfaces of the transparent substrate, and each light-diffusing layer comprises an ionizing radiation curing resin and an ultraviolet light absorber and has, on its surface, fine irregularities that have a function of diffusing light.

9. The surface light source unit according to claim 7, wherein

the ultraviolet light absorber is one, or two or more compounds selected from benzotriazole ultraviolet light absorbers, salicylate ultraviolet light absorbers, and benzophenone ultraviolet light absorbers.

10. The surface light source unit according to claim 9, wherein

the ultraviolet light absorber further contains a hindered amine radical scavenger.

11. The surface light source unit according to claim 7, wherein the light-diffusing layer is provided at least on one surface of the transparent layer through a primer layer.
12. The surface light source unit according to claim 7, wherein the direct-type surface light source member contains, as a light source, 12 cold cathode ray tubes that are arranged in parallel, the surface light source unit is of 21 type (21 inches), and the center portion of the surface of the surface light source unit shows a change in hue (b^*), based on the L^* , a^* , b^* color system according to JIS-Z-8729, of not more than 2.0 as a difference between the hue values determined right after the incorporation of the light diffusion film in the surface light source unit and after 5000-hour lighting of the light source.
13. A liquid crystal display comprising:
 - a surface light source unit, and
 - a liquid crystal display panel placed on the light-emerging side of the surface light source unit,
 - the surface light source unit comprising:
 - a direct-type surface light source member containing a plurality of light sources that are arranged in parallel and a reflector surrounding these light sources, having an opening on the light-emerging side and a light-reflecting face on its inner surface,
 - a light diffusion film placed on the light-emerging side of the direct-type surface light source member, and
 - a lens film placed on the light-emerging side of the light diffusion film,
 - the light diffusion film comprising:
 - a transparent substrate, and
 - a light-diffusing layer provided at least on one surface of the transparent substrate either directly or through another layer,
 - the light-diffusing layer comprising an ionizing radiation curing resin and an ultraviolet light absorber and having, on its surface, fine irregularities that have the function of diffusing light.